1. A method of providing a custom bedding product for an individual person

comprising the steps of:

inputing into a digital processor body type data containing weight and size information of the individual person;

5   with the processor, evaluating body type data and calculating body type parameters for the individual person;

correlating the body type parameters with bedding product evaluation data and determining bedding product parameters specifying the design of a bedding product for providing suitable pressure distribution and lumbar support for the

10   individual person.

2. The method of claim **1** wherein the inputing of the body type data into the processor includes:

providing a stable support surface;

providing a pressure sensor array on the top of the support surface, the array

5   including a plurality of pressure sensors each adapted to measure pressure exerted against an area of the pad by a person reclining on the pad; and

with the individual person reclining on the pad, generating the body type data characteristic of the individual person.

3. The method of claim **2** wherein:

the stable support surface includes an airbed having at least one zone inflated to a standardized pressure.

4. The method of claim 2 wherein:

the bedding product parameters include at least one box spring coefficient indicative of a suitable box spring for the individual person, at least one innerspring coefficient indicative of a suitable inner spring for the individual

5   person, and at least two pad coefficients indicative of at least two suitable pad layers for the individual person.

5. ~~The method of claim 2 wherein:~~

the bedding product parameters include at least one coefficient responsive to the total weight of the individual person and the bedding product providing step includes the step of determining a box spring component of the bedding

5   product based on the at least one coefficient.

6. The method of claim 2 wherein:

the bedding product parameters include at least one coefficient responsive to the weight distribution area of support of the individual person and the bedding product providing step includes the step of determining an innerspring

5   component of the bedding product based on the at least one coefficient.

7. The method of claim 2 wherein:

the body type parameters include at least one coefficient responsive to a selected body width of the individual person and the bedding product providing step includes the step of determining a mattress fill component of the bedding product based on the at least one coefficient.

8. The method of claim 2 wherein:

the body type parameters include at least one coefficient responsive to the lumbar support of the individual person and the bedding product providing step includes the step of determining a box spring component of the bedding product

5   based on the at least one coefficient.

4 9. The method of claim 7 wherein the inputing of the body type data into the processor includes:

providing an airbed having at least one zone inflated to an initial standardized pressure;

5   with the individual person reclining on the airbed, measuring pressure of air in the airbed and generating therefrom at least some of the body type data characteristic of the individual person.

5 10. The method of claim 9 wherein the inputing of the body type data into the processor further includes:

obtaining body type information from information provided by the individual person and entering the information into the computer.

6 11. The method of claim 1 wherein the inputing of the body type data into the processor includes:

obtaining body type information from information provided by the individual person and entering the information into the computer.

13 12.   A system for customization design of a bedding product for an individual

person, the system comprising:

      a support surface which provides a constant pressure of support;

      a pad positioned atop the support surface;

5   a plurality of pressure sensors located on the pad, the pad and support

surface adapted for the individual person to lie down thereon;

      a processor electrically coupled to the pressure sensors to record the

pressure data detected by the respective pressure sensors;

      the processor being programmed with an evaluation algorithm to process the

10   pressure data and produce a pressure profile for the individual person on the

pad and in response to the pressure profile to calculate specific body shape

parameters correlated to components of a bedding product providing suitable

pressure distribution and lumbar support, the parameters including at least one

box spring coefficient indicative of a suitable box spring for the individual person,

15   at least one innerspring coefficient indicative of a suitable inner spring for the

individual person, and at least two pad coefficients indicative of at least two

suitable pad layers for the individual person.

14. The method of determining the support characteristics of a test mattress relative to a human weight and size profile, which method comprises:

(a) measuring the weight distribution profiles of numerous different height, weight and shaped persons;

5   (b) measuring and determining the optional deflection profile of those same persons for optimal support;

(c) inputting the information of steps (a) and (b) into a computerized control;

(d) locating a selected mattress in a test apparatus;

(e) applying a weight profile load of a selected test profile person to pistons

10   connected to independently movable pressure plates of the test apparatus, which pressure plates are positioned and sized on the mattress so as to mimic the shape of the selected person;

(f) measuring the deflection of each pressure plate into the test mattress; and

15   (g) comparing the measured deflection characteristics of the test mattress to the optional support deflections for the test profile person.

15 ~~14~~. The method of determining the support characteristics of a test mattress relative to a human weight and size profile, which method comprises:

(a) measuring the weight distribution profile of numerous different height, weight and shaped persons;

5   (b) measuring and determining the optional deflection profile of those same persons for optimal support;

(c) inputting the information of (a) and (b) into a computerized control;

(d) locating a selected mattress in a test apparatus;

(e) applying optimum deflection characteristics profile of a selected test

10   profile person to that mattress by applying pressure to pistons connected to independently movable pressure plates of test apparatus, which pressure plates are positioned and sized so as to mimic the shape of the selected test profile person; and

(f) measuring the pressure on the pistons to obtain this optimum deflection.